

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A network device for transmitting a bitstream, the ~~system~~ network device comprising:

a first communication interface configured to receive the bitstream, the bitstream including a timing relationship for data in a portion of the bitstream;

a processing apparatus configured to a) process the data in the bitstream portion in a manner that introduces jitter in the data and b) create a timestamp including timing information that describes the timing relationship of the data as the data was received; and

a second communication interface configured to transmit an output bitstream onto a channel, the output bitstream including the timestamp and the data including jitter introduced by the processing apparatus.

2. (Previously Presented) The network device of claim 1 wherein the processing apparatus is configured to multiplex, re-multiplex, de-multiplex, encode, transcode, scramble, and de-scramble the data.

3. (Previously Presented) The network device of claim 1 further including a synchronization source configured to provide a reference time to the processing apparatus that is used in generating the timestamp.

4. (Previously Presented) The network device of claim 1 wherein the processing apparatus includes a set of processing modules that may each create the timestamp.
5. (Previously Presented) The network device of claim 1 wherein the processing apparatus is configured to add the timestamp to at least one packet in a set of packets included in the first bitstream.
6. (Previously Presented) The network device of claim 5 wherein the bitstream is an MPEG-2 compressed bitstream and the processing apparatus is configured to add the timestamp to a transport packet in the MPEG-2 bitstream.
7. (Previously Presented) The network device of claim 6 wherein the processing apparatus is configured to replace a synchronization byte in the bitstream with a new synchronization byte, the new synchronization byte signalling the beginning of payload data for a payload portion of the bitstream.
8. (Previously Presented) The network device of claim 6 wherein the second communication interface is configured to transmit the output bitstream according to a DVB/ASI protocol.
9. (Previously Presented) A method for transmitting a bitstream using a network device, the method comprising:
receiving the bitstream at the network device;

creating a timestamp that includes timing information that describes a timing relationship of data in a portion of the bitstream as the data was received;

processing the data in the bitstream portion in a manner that introduces jitter into the data; and

transmitting an output bitstream from the network device onto a first channel, the output bitstream including the timestamp and the data including jitter introduced by the processing.

10. (Previously Presented) The method of claim 9 further including adding a synchronization byte that signals the beginning of payload data for a packet included in the bitstream.

11. (Original) The method of claim 10 wherein the bitstream includes a set of packets and the method further includes adding the timestamp to at least one packet in the bitstream.

12. (Original) The method of claim 9 further including receiving the bitstream from a second channel.

13. (Previously Presented) The method of claim 12 further including restoring the timing relationship of the data in the portion of the bitstream after processing has occurred using the timing information included in the timestamp.

14. (Original) The method of claim 9 wherein the bitstream is an MPEG-2 compressed stream.

15. (Original) The method of claim 14 wherein transmitting uses a DVB/ASI protocol.

16. (Original) The method of claim 15 wherein the transmitting utilizes an 8B/10B encoding scheme.
17. (Previously Presented) The method of claim 14 further including adding a stream identifier to the bitstream.
18. (Original) The method of claim 9 wherein processing comprises one of multiplexing, re-multiplexing, de-multiplexing, encoding, transcoding, scrambling, and de-scrambling.
19. (Original) The method of claim 9 wherein the processing is performed in real-time.
20. (Previously Presented) A network device for providing a bitstream, the system comprising:
 - means for receiving the bitstream;
 - means for creating a timestamp that includes timing information, the timing information describing a timing relationship of data in a portion of the bitstream as the data was received;
 - means for processing the data in the bitstream portion in a manner that introduces jitter in the data; and
 - means for transmitting an output bitstream onto a first channel, the output bitstream including the timestamp and the data including jitter introduced by the processing.

21. (Previously Presented) A network device of claim 20 wherein the means for transmitting comprises a means for transmitting using a DVB/ASI protocol.

22. (Previously Presented) A network device for transmitting a bitstream, the system comprising:

a first communication interface configured to receive the bitstream, the bitstream including a timing relationship for video data in a portion of the bitstream;

a processing apparatus configured to a) process the video data in the bitstream portion in a manner that introduces jitter in the video data and b) create a timestamp including timing information, the timing information describing the timing relationship of the video data in the portion of the bitstream as the video data was received; and

a second communication interface configured to transmit an output bitstream onto a channel, the output bitstream including the timestamp and the video data including jitter introduced by the processing apparatus.

23. (Previously Presented) The network device of claim 22 wherein the processing apparatus is configured to multiplex, re-multiplex, de-multiplex, encode, transcode, scramble, and de-scramble the data.